CECW-EH	Department of the Army U.S. Army Corps of Engineers Washington, DC 20314-1000	ER 1110-2-1454
Engineer Regulation 1110-2-1454		15 July 1983
	Engineering and Design	
	CORPS RESPONSIBILITIES FOR NON-FEDERAL HYDROELECTRIC POWER DEVELOPMENT UNDER THE FEDERAL POWER ACT	
	Distribution Restriction Statement Approved for public release; distribution is unlimited.	

DEPARTMENT OF THE ARMY ER 1110-2-1454

DAEN-CWE-HY

U.S. Army Corps of Engineers Washington, D.C. 20314

Regulation No. 1110-2-1454

15 July 1983

Engineering and Design CORPS RESPONSIBILITIES FOR NON-FEDERAL HYDROELECTRIC POWER DEVELOPMENT UNDER THE FEDERAL POWER ACT

- 1. <u>Purpose</u>. This regulation provides policy and guidance for review of preliminary permit and license applications for non-Federal hydroelectric power development either at or affecting US Army Corps of Engineers (Corps) water resource projects.
- 2. Applicability. This regulation applies to all field operating activities having civil works responsibilities.

3. References.

- a. Federal Power Act (41 Stat. 1063, 16 U.S.C. 791-823) 10 June 1920, as amended (FPA).
- b. ER 10-1-41, Corps Wide Centralized Functions and Special Missions Assigned to Divisions and Districts.
 - c. ER 1105-2-10, Planning Programs.
- d. ER 1145-2-303 (33 CFR 320.330), Permits for Activities in Navigable Water or Ocean Waters.
- 4. Objectives. The objective of this regulation is to prescribe procedures for executing Corps of Engineers functions under the authority of the Federal Power Act administered by the Federal Energy Regulatory Commission (FERC). Based on specific requests from the Commission, these functions include:
- a. Review of applications for preliminary permits and licenses filed with FERC for development of hydroelectric power at Corps of Engineers projects or at non-Corps projects to ascertain potential impacts on Corps responsibilities.
- b. Review of applications for surrender or termination of license to ascertain impacts on Corps responsibilities.
- c. Review of applications for exemption from all or a portion of Part I of the Federal Power Act for "Small Hydroelectric Power Projects," with an installed capacity of 5 megawatts (MW) or less, to ascertain impacts on Corps responsibilities.

- 5. <u>Definitions</u>. The following definitions are used by the FERC in the administration of the Federal Power Act:
- a. Licensed Project. A non-Federal hydroelectric project for which the FERC has issued a license granting authority to construct and operate a proposed project, or continue to operate an existing project.
- b. Major Projects. Hydroelectric projects having installed capacity greater than 1.5 MW.
- c. Minor Projects. Hydroelectric projects having installed capacity of 1.5 MW or less.
- d. Small Hydroelectric Power Projects. For the purpose of exemption from all or a portion of Part I of the Federal Power Act, "Small Projects" means projects having an installed capacity of not more than 5 MW, and that would utilize the water power potential of an existing dam not owned or operated by the United States.
- e. Preliminary Permit Application. An application filed by a non-Federal entity with the FERC as a preliminary step in anticipation of filing for a license to construct and operate a hydroelectric project. A preliminary permit does not authorize construction. It merely gives the permittee priority of application for a FERC license over other non-Federal entities for a period of time. The permittee then develops information necessary for inclusion in an application for a license to construct and operate a hydroelectric project. Analysis of this information may result in a decision by the permittee to apply for a license or to withdraw its intent to file.
- f. Relicensing. Relicensing is a procedure applicable to projects for which the original license period (usually 50 years) will expire or has expired and an application for new license has been or will be filed with the FERC.
- g. Takeover. A procedure whereby the Federal Government assumes project ownership. Upon expiration of a license for a hydroelectric project, the United States, under certain specific conditions set forth in Section 14 of the Federal Power Act may take over, maintain and operate the project. This does not apply to any project owned by a State or local government. Takeover procedures are not applicable to minor projects.
- 6. Authorities. The Federal Power Act, as amended, (Reference 3a), delegates to the Secretary of the Army and to the Commander, USACE certain functions necessary for the FERC's administration of the Act. Implementation was provided through instructions issued by the President in a letter dated 18 May 1931 to the Secretary of War. These functions are set forth in the following excerpts from the Act:

a. Section 2 of the Act provides in part that:

"The Commisssion may request the President to detail an officer or officers from the Corps of Engineers, or other branches of the United States Army to serve the Commission as engineer officer or officers . . ."

b. Section 4(e) of the Act provides in part that:

"The Commission is hereby authorized and empowered . . . to issue licenses to citizens of the United States, or to any associations of such citizens, or to any corporation organized under the laws of the United States or any State thereof, or to any State or municipality for the purpose of construction, operating, and maintaining dams, water conduits, reservoirs, powerhouses, transmission lines, or other project works necessary or convenient for the development and improvement of navigation and for development, transmission, and utilization of power across, along, from or in any of the streams or other bodies of water over which Congress has jurisdiction. . ."

- ". . . Provided, that licenses shall be issued within any reservation only after a finding by the Commission that the license will not interfere or be inconsistent with the purpose for which such reservation was created or acquired, and shall be subject to and contain such conditions as the Secretary of the department under whose supervision such reservation falls shall deem necessary for the adequate protection and utilization of such reservation."
- ". . . Provided further that no license affecting the navigable capacity of any navigable water of the United States shall be issued until the plans of the dam or other structures affecting navigation have been approved by the Commander, USACE and the Secretary of the Army".
- 7. Delegation of Authority. Division commanders, having civil works responsibility, are delegated the authority for direct communication with the Washington office of the FERC for all matters relating to FERC applications for preliminary permits, licenses, and headwater benefits data and reports. The delegation of authority includes approval of plans under Section 4(e) of the Federal Power Act insofar as interests of navigation are concerned. The division commanders are responsible for adequacy of design, plans, and construction specifications of licensed non-Federal hydropower facilities that will be an integral part of or that could affect the structural integrity or operation of a Corps project.
- 8. Statement of Policy. The Corps supports suitable non-Federal hydropower plant construction at its water resources projects. This will be accomplished by adherence to the requirements of this ER and to the provisions of the interagency Memorandum of Understanding (MOU) between the Department of the Army and FERC. (Copy attached as Appendix A).

- 9. Coordination with the FERC. The referenced MOU dated 2 November 1981, between the Department of the Army and the FERC, provides for coordination in planning, design, and construction activities between the Corps field commanders and FERC regional engineers. This coordination should provide the mechanism to achieve the Corps policy objectives for non-Federal hydropower development at Corps projects. Also, the Corps general requirements indicated in Paragraph 14a of this ER provide a basis for the scope of studies and design considerations by non-Federal entities. These requirements are for safeguarding the public interest at Corps projects relative to water control management for flood control, navigation, water supply, water quality, recreation and other project purposes.
- 10. FERC Procedure for Corps of Engineers Comments on Applications.
 - a. Application for major hydroelectric project license.
- (1) The FERC will forward a letter to the appropriate division commander accompanied by a public notice of the application.
- (2) Within 30 days, thereafter, the applicant will forward copies of the application directly to the division commander.
- (3) Division commander comments are to be furnished to the FERC within 60 days of the mailing of application by the applicant.
- b. Applications for minor hydroelectric project license, exemption, and preliminary permit. The FERC requests comments on these type of applications through public notices which are mailed to respective Corps division offices. FERC will not make a separate written request to the Corps of Engineers. Normally, the Commission's public notices allow a period from 30-60 days for comments on these type of applications.
- 11. Review of FERC Applications for Hydropower Development. Upon referral by the FERC Washington office, the division commander will assign the investigation of an application (or public notice thereon) for preliminary permit, license, or exemption from license to the appropriate Corps district commander, who will report back his findings to the division commander. The division commander, in accordance with delegation of authority cited in Paragraph 7, will be responsible for forwarding in a timely manner to the FERC's Washington office, all actions requested by the FERC. Actions and coordination with the FERC will be consistent with the requirements of Part I of the MOU referenced in paragraph 3c. A copy of all division commanders' responses to the FERC will be forwarded to HQ USACE (DAEN-CWH-Y)WASH DC 20314. The division commanders may delegate to district commanders responses to the FERC on hydropower applications or notices that do not affect a Corps project. The nature of review comments and recommendation by the field commanders to the FERC will depend upon the type of request or application received from the FERC. The type of FERC application for hydropower development and the required Corps action on them are discussed in the following paragraphs.

12. Preliminary Permit Applications

- a. The Corps will not object to issuance of FERC preliminary permits for hydropower feasibility studies at or affecting Corps projects. Non-Federal entities will be asked to coordinate their studies with any authorized on-going Corps hydropower feasibility studies. Regardless of the status of preliminary permits, the Corps will continue its authorized hydropower feasibility studies with a view toward establishing the best mode of hydropower development consistent with the existing multiple purpose project services to the public.
- b. Non-Federal hydropower studies under an active FERC preliminary permit will be addressed in on-going Corps hydropower studies covering the same site. Public announcements, notices and meetings relative to Corps hydropower studies will acknowledge non-Federal hydropower studies under the FERC permit. This acknowledgement will include the Corps recommendation to the FERC for coordination of non-Federal studies with the Corps in order to minimize any unnecessary duplication in hydropower planning and design.

13. License Application for Hydropower Construction at Non-Federal Site.

- a. The effect of proposed hydroelectric power plant construction on Corps water control management responsibilities such as flood control, navigation, water supply, low flow augmentation, water quality, and other purposes must be evaluated by the applicant. Appropriate recommendations will be made by the division commander to the FERC for safeguarding all of the above functions that may be affected.
- b. Section 4(e) of the Federal Power Act provides for approval of plans for hydroelectric power projects as noted in paragraph 7. If such project facilities affect navigable waters of the United States, the division commander has approval authority. Section 4(e) approval will obviate the need for a Department of the Army permit under Section 10 of the 1899 River and Harbor Act.
- c. The division commander will advise the FERC whether non-Federal hydropower proposals are in conflict with any projects constructed or being studied by the Corps.
- d. Proposed hydropower development environmental impacts affecting Corps resources must be identified by the applicant, mainly with respect to functions that are the direct responsibility of the Corps such as navigation, flood control, water supply, water quality, etc. The state, local entities and other Federal agencies who are directly responsible for management of functions such as fish and wildlife are offered opportunities by the FERC to comment on their responsibilities. Division commanders will advise the FERC with respect to any environmental impacts on Corps resources and recommend mitigation measures when the impacts are adverse.

e. Consideration of structural safety and inflow design flood adequacy for the FERC licensed projects, not involving a Corps water resource project, are the responsibility of the FERC.

14. License Applications for Hydropower Construction at Corps Projects.

- a. General Requirements. In addition to the items discussed in paragraph 13, construction of hydroelectric power facilities (under the FERC license) at a U.S. Army Corps of Engineers water resource project, will be subject to the following general requirements, when applicable:
- (1) Hydroelectric power development must be compatible with the authorized purposes of the Federal project and other Congressional Acts applicable to regulation of Federal facilities. Verification of compatibility may, under certain circumstances, require physical and/or mathematical modeling, the cost of which will be borne by the applicant.
- (2) Full hydropower potential of the site must be considered in planning, design and construction of power plant.
- (3) Design, construction and operation of all power facilities which would affect the structural integrity and operational adequacy of the Federal dam, including construction procedures and sequence, must be approved by the Corps.
- (4) In the interest of multiple-purpose water management, the Corps may require a signed memorandum of understanding between the prospective licensee and the Corps specifying the operational procedures and power rule curves consistent with overall project management objectives and efficient system flow regulation.
- (5) The prospective licensee must reimburse the Federal government for the use of lands, facilities and an appropriate part of the costs of existing Federal projects which makes the installation of power feasible. Assessment of these costs and development of charges therefrom will be made by the FERC.
- (6) Reimbursement to the Federal government will be required for any additional construction costs incurred by the government as a result of installation of the power facilities.
- (7) Licensees, in compliance with Section 10(c) of the Federal Power Act, must furnish power, free of cost, to the United States for operation and maintenance of navigation facilities at project site. This power will be provided at the voltage and frequency required for such facilities, whether such facilities are constructed by the licensee or by the United States.
- (8) The licensee shall furnish, operate and maintain adequate lights, signals and protective warning devices to provide for safe navigation and for the safety of persons using the Federal project.

- (9) In compliance with Section 404 of the Clean Water Act (33 U.S.C. 1344), a Department of the Army permit is required for any discharge of dredged or fill material, including activities associated with hydropower development, into the waters of the United States.
- b. Coordination of License Application with Corps Preauthorization Studies.
- (1) The Corps' objective in hydropower studies is to recommend to the Administration and the Congress a plan of hydropower construction, considering and seeking potential non-Federal partnership arrangements, that would best use the site power potential that is compatible with the multiple water resources use for the public benefit. Section 10a of the Federal Power Act basically sets the same objective for a non-Federal hydropower development. The division commanders receiving a license application from the FERC for hydropower construction at a Corps project will make appropriate recommendations to the FERC with full consideration of the above objective.
- (2) In general, the status of Corps preauthorization hydropower studies should not be an impediment to non-Federal hydropower development at Corps projects. Recommendations on license application to the FERC by the division commanders will be based on the technical and operational merits of the non-Federal hydropower construction proposals. The best available data and information from the Corps' own feasibility study efforts will be used in evaluation of non-Federal hydropower proposal. In cases where the Corps' study is not sufficiently advanced for use in evaluation or as a basis for appropriate recommendations to the FERC, the applicable general requirements in paragraph 14a will be used to establish data or studies from license applicant for hydropower impact evaluation.
- (3) Recommendations by the division commanders to the FERC will be based on the merit of the non-Federal hydropower proposal, without regard to completion date of Corps' preauthorization hydropower studies. When a Corps favorable preauthorization report has been submitted by the Commander, USACE, to the Assistant Secretary of the Army (Civil Works), the division commanders will furnish comments on license application to the FERC with a request that the decision by the FERC on issuance of license be deferred pending the Chief of Engineers recommendation to the FERC Chairman. The division commander in this case, will furnish recommendations to the HQ USACE (DAEN-CWH-Y) on the merit of non-Federal hydropower proposal in comparison with the Federal construction proposal expressed in the preauthorization document.
- (4) Decisions regarding the continuation of Corps hydropower feasibility studies shall be made on the basis of guidance contained in ER 1105-2-10, paragraph 1-6.

15. Review and Approval of Non-Federal Hydropower Construction at Corps Projects.

- a. Division Commanders will review the proposed overall general plans (license application) for compliance with pertinent Corps policies and general requirements. The commander's review and recommendations to the FERC will cover impacts of the proposed non-Federal hydropower construction on the authorized functions, safety, and operation of Corps projects.
- b. In all cases a copy of the division commander's review comments and recommendations to the FERC regarding license applications for development of hydropower affecting Corps projects, will be forwarded to HQ USACE (DAEN-ECE-B) WASH DC 20314 for monitoring purposes. A copy of the license application will be included in the submission.
- c. Division commanders, with the exception of the Commanders, Pacific Ocean Division and New England Division, will review and approve the licensee's detailed design analysis and plans and specifications for construction of hydropower facilities that affect the structural integrity or operation of Corps projects. The division commanders, prior to approving the licensee's detailed design, will consult with the appropriate Corps Hydroelectric Design Centers (see ER 10-1-41) with respect to the following hydropower structural and mechanical features that could affect the integrity and safety of Corps projects:
 - penstocks
 - vents
 - bifurcations
 - gates and valves
 - hydraulic transient analysis of the above facilities
- d. The Commanders, Pacific Ocean Division and New England Division, shall submit the licensee's detailed design analysis and plans and specifications to DAEN-ECE-B for approval. Submittals to HQ USACE will include review comments by the appropriate Hydroelectric Design Center and the commander's recommendations.
- e. Any disagreement regarding the Corps requirements for design, construction and operation which has not been resolved by the division commander will be referred to DAEN-ECE-B for resolution.

16. Relicensing (New License) Applications.

a. Upon expiration of the original FERC license, an application for relicensing the project, filed with the FERC, will be subject to full review and evaluation consistent with the requirements of this ER.

- b. Review comments on a relicense application to the FERC will include a recommendation with respect to possible need for takeover of the project by the Federal Government as described in Section 7(c) of the Federal Power Act.
- 17. Application for Exemption from Licensing. Exemption from all or a portion of Part I of the Federal Power Act may be provided by the FERC for a proposed installed generating capacity of 5 MW or less at an existing project. The FERC considers such exemptions based on a case-by-case project evaluation. A division commander's review and recommendations on these type of applications will be consistent with the requirements discussed in paragraph 13, as applicable. An exemption is not applicable to existing dams owned or operated by the United States.
- 18. Department of the Army Permit(s) Requirements. The following procedures will be followed in connection with the Department of the Army permit(s) requirements:
- a. Corps permit responsibilities under Section 10 of the River and Harbor Act of 1899, for power related activities will be met through the FERC licensing procedure by including the interests of navigation in the terms and conditions of the license. This is compatible with Section 4(e) of the Federal Power Act, which provides for Corps approval of plans affecting the interests of navigation.
- b. Corps permit responsibilities under Section 404 of the Clean Water Act (33 U.S.C. 1344), involving projects under the jurisdiction of the FERC, will be met in coordination with the FERC, as specified in Part II of the MOU between the FERC and the Department of the Army (reference 3c).
- c. Application to Corps division commanders for approval of repairs, maintenance or modification of non-Federal water power projects authorized under River and Harbor Acts, as well as special Acts of Congress prior to 1920, or request for advice with respect thereto should be referred to the FERC for consideration in accordance with the provisions of the Federal Power Act. The applicant will be advised that its application is being referred to the FERC for consideration.
- 19. Investigation of Applications for Surrender or Termination of License. The period of the FERC license for hydropower projects is usually 50 years. During and/or upon the expiration of the period of a license, a licensee may file with the FERC an application for surrender or termination of its license. These applications may encompass requests for physical removal of an existing dam and/or powerhouse structures from a stream. Division commanders will consider the possibility that sediment discharge resulting from removal of a dam structure from a navigable river or from any site that may affect navigable waters could impair the anchorage and navigation and/or flood carrying capacity of the stream. In those cases where there is a possibility of significant downstream shoaling, recommendations may be made to the FERC requiring the licensee to bear the expense

for removal of shoaling determined by the Corps to be detrimental to navigation. Other possible recommendations include gradual lowering of the dam over a period of time and/or possibility of sediment removal prior to dam removal. It should also be noted that a Department of the Army permit under Section 404 of the Clean Water Act (33 U.S.C. 1344) as discussed in paragraph 18, may be needed in connection with removal of dams. When the FERC approves the removal of power facilities at a project licensed by the FERC, continuation of existence of the nonpower project on or affecting navigable waters may require a Department of the Army permit in compliance with Section 10 of the River and Harbor Act of 1899. Furthermore, it should be noted that in the absence of a FERC nonpower use license pursuant to 16 USC 808(b), the structural safety and maintenance of the dam and reservoir will be governed by the laws and regulations of the state in which the project is located.

- 20. Safety of Licensed Hydroelectric Projects. The FERC is responsible for the safety aspects of projects for which they issued licenses. Review of safety features by the Corps is only required when a non-Federal hydropower project could impact on the safety or operational adequacy of a Corps project.
- 21. Standard Terms and Conditions Used by the FERC in its Permits and Licenses. Appendix B to this regulation includes a listing of Standard Article forms used by the FERC in prescribing terms and conditions for preliminary permits and licenses for hydroelectric power projects. Standard Articles listed in Appendix B can be obtained directly from the FERC offices. To protect Corps interests in design, construction, and operation of non-Federal hydropower facilities, Corps division commanders will consider the necessity for including, in any preliminary permit or license, special terms and conditions in addition to the FERC requirements articles.

22. Funding of Activities

- a. Funding for review and approval activities in connection with all FERC preliminary permit and license applications will be requested by the division commanders, as part of the Civil Works annual budget request, under the line item FERC Licensing Activities (901-172). Request for General Investigation funds will be based on the estimated number of FERC applications, or related cases, that division and district offices expect to review during the fiscal year(s).
- b. When a non-Federal hydropower plant is licensed by the FERC for construction at a Corps project, the licensee will be required to reimburse the Corps directly for all reasonable costs associated with the Corps review and approval of the final design, construction, plans, specifications, and inspection of the construction. The cost of modifying the existing Corps project as-built drawings to reflect the power facilities constructed at Corps projects should also be reimbursed by the licensee.

Arrangement for this purpose will be made with the licensee preferably at an appropriate coordination meeting between the district commander and the FERC licensee.

- 23. Annual Report. The division commanders will prepare and submit an annual report as follows:
- a. Title Data on Non-Federal Hydropower Development of Corps Projects (RCS: DAEN-CWH-1).
- b. Purpose and Scope The report which is for use in preparation of the Chief of Engineers Annual Report will provide the following data:
- (1) Total number of FERC preliminary permit applications (feasibility studies) received and reviewed for hydropower development at:
 - (a) Corps projects
 - (b) Non-Corps projects
- (2) Total number of FERC license applications received and reviewed for power plant construction at:
 - (a) Corps projects
 - (b) Non-Corps projects
- (3) Total number of FERC licenses issued, during the preceding Fiscal Year, for construction of hydropower facilities at Corps projects.
- (4) Total number of FERC applications for amendment of license, relicense, or exemption of license received and reviewed.
 - (5) Total number of FERC EIS reports received and reviewed.
- (6) A listing of non-Federal licensed hydropower plant installations, existing and under construction, at Corps projects within the respective division. Identify each project by FERC Number, name of the power company, and the name of the Corps project at which the power plant is located or under construction.
- (7) For each licensed hydropower plant under design and construction at a Corps project, indicate the total amount of reimbursement for the cost of review and approval of design and construction by the Licensee(s).
- c. Reporting Period and Submission Date The above data will be reported by 15 November of each year for the proceding fiscal year activities. Two copies of the report will be sent to HQ USACE (DAEN-CWH-Y), WASH DC 20314.

ER 1110-2-1454 15 Jul 83

- d. The "as of" date is 30 September of each year.
- e. Security Classification unclassified.
- f. Source of Data District & Division's non-Federal hydropower activities file.
- g. Preparation Instruction ~ The data will be furnished in the format and order described in Paragraph 23b. above.

FOR THE COMMANDER:

2 Appendixes
App A - Copy of FERC/
Army MOU
App B - Listing of FERC
std Forms

JAMES W. RAY
Colonel, Corps of Engineers
Chief of Staff

A. J. Genetti, Jr. LTC, CE Ass't Chief of Staff

APPENDIX A

MEMORANDUM OF UNDERSTANDING BETWEEN THE

FEDERAL ENERGY REGULATORY COMMISSION AND THE DEPARTMENT OF THE ARMY

REGARDING

NON-FEDERAL HYDROPOWER DEVELOPMENT

In the interest of mutual cooperation for expediting non-Federal hydropower development, the Federal Energy Regulatory Commission, hereinafter referred to as the Commission, pursuant to the authority contained in the Federal Power Act, as amended; 16 U.S.C. Sec 791 a et seq; and the Department of the Army hereinafter referred to as the Army, pursuant to the interdepartmental work provision of 47 Stat. 417 (31 U.S.C. Section 686), enter into this Memorandum of Understanding (MOU);

WHEREAS, the Commission is responsible for issuing preliminary permits and licenses to non-Federal entities for the development of hydroelectric power plants under its jurisdiction, including power plants utilizing Federal dams where Congress has not authorized power development as a project purpose.

WHEREAS, the U.S. Army Corps of Engineers, hereinafter referred to as the Corps has constructed water resources projects throughout the nation where a potential exists for the development of hydroelectric energy and is agreeable to the development of hydropower by non-Federal entities, provided that in any license issued by the Commission, hydroelectric development is found by the Commission to be compatible with the purposes for which Congress authorized the project, and provided Federal hydroelectric facilities have not been authorized by Congress for construction;

WHEREAS, the Army has certain regulatory responsibilities and the Army and the Commission wish to take all possible steps to reduce regulatory burdens and minimize duplication of Federal review;

WHEREAS, both the Commission and the Army wish to encourage non-Federal hydropower development;

PART I

NOW THEREFORE, in consideration of mutual cooperation and the encouragement of developing renewable resources by the promotion of hydroelectric energy at existing and future Corps' facilities, the Commission and the Army agree to the following:

1. Feasibility Study of Hydropower Potential

a. The Commission will require, in its preliminary permits authorizing feasibility studies of a facility at a Corps of Engineers' dam that the Permittee coordinate those studies for a proposed project with the appropriate Corps' District Engineer. This is to ensure that the feasibility

studies will result in a plan of development consistent with the authorized purposes including operations, of the Federal project.

b. At the initial meeting between the Corps and the Permittee, which shall be requested by the Permittee, the Corps will provide to the Permittee all pertinent general information as is available on: status and content of District's studies relating to hydropower; physical constraints at the Corps facilities relating to hydropower development; requirements for design, construction, and hydraulic model studies, if necessary; requirements to avoid adverse impact on other project purposes; and other items or conditions that may affect the Permittee's studies for the proposed power plant. The Permittee shall be responsible for conducting, at its own expense, all necessary technical studies and documentations, including reports, drawings, etc. in such scope and detail that are needed to confirm technical and operational feasibility of a proposed power plant at a Corps' site.

2. Design, Construction and Operation

- a. The licensed hydropower facilities that will be an integral part of or that could affect the structural integrity or operation of the Corps' project shall be designed and constructed in consultation with and subject to the review and approval of the appropriate Corps' District Engineer.
- b. The Corps' approval of the final design with regard to impact on navigation will be exercised under Section 4(e) of the Federal Power Act for all proposed non-Federal hydropower facilities at the Federal site.
- c. The Commission will require Licensees to reimburse the Corps directly for all reasonable costs associated with the Corps' review and approval of the design and construction, plans and specifications, and the inspection of construction, cited in paragraph 2a and 2b above, for power development at Corps' projects, provided that charges shall not be assessed for information, services, or relationships that would normally be provided to the public. The Corps will bill the Licensee for costs directly related to the review of design and construction of those licensed facilities that affect the integrity or operation of the existing project structure. Disagreement by either the Licensee or the Corps regarding reimbursement will be referred to the Director, Office of Electric Power Regulation or successor office, hereinafter (OEPR) for resolution. Such reimbursable costs shall be limited to those associated with design approval and construction, and shall not include those costs related to commenting on permit and license applications pursuant to Section 4(e) of the Federal Power Act. Licensee shall comply with 16 U.S.C. Sec. 804 and all such other provisions of the Federal Power Act as may be appropriate.
- d. Copies of all correspondence between the Licensee and the Corps regarding the schedule and progress of the design review and approval will be provided to the Commission's appropriate Regional Engineer. The Regional Engineer will not authorize construction of the facility to start until the Corps' District Engineer's written approval of the construction plans and specifications has been received by Regional Engineer or his designee.

- e. The Commission's Regional Engineer will be responsible for surveillance of the construction activities within the licensed project boundary. The Licensee's proposed construction inspection program will be furnished to the Corps for review and comment prior to approval by the Regional Engineer. The construction of the facilities will be inspected by the Regional Engineer's staff during construction of the project, generally at monthly intervals. Copies of the reports of these inspections will be furnished to the Corps. The Corps shall perform periodic or continuous inspections at critical stages of the construction of those portions of the licensed project works that, in the judgment of the Corps, may affect the integrity or operation of existing project structures. A schedule of Corps' proposed inspections will be furnished to the Regional Engineer. The Regional Engineer and the Corps shall take all necessary steps in coordination to avoid duplication of inspections. Copies of the Corps' inspection reports will be furnished to the Regional Engineer within 30 days of the date of inspection. However, the Corps reserves the right to enter the construction site at any time to perform an inspection. Any construction deficiencies or difficulties detected by the Corps' inspections will be immediately reported to the Regional Engineer. Upon review, the Regional Engineer will refer the matter to the Licensee for appropriate action. The Corps' inspector will report to the Regional Engineer or his representative regarding the need to stop construction while awaiting resolution of construction deficiencies or difficulties if such deficiency or difficulty would affect the integrity of existing project structures. In cases when construction practice or deficiency may result in an imminent danger to the integrity and safety of the existing project, the Corps inspector has the authority to stop construction while awaiting the resolution of the problem.
- f. The completed licensed facilities will be inspected periodically by the Regional Engineer's staff to determine that the facility is being properly operated, maintained, and administered in conformance with license conditions. Copies of the reports of these inspections will be furnished to the Corps within 30 days of the date of inspection.
- g. Portions of the licensed project works that may affect the integrity and operation of the Corps' project will be inspected and evaluated by the District Engineer as a separate item under the Corps' Periodic Inspection and Continuing Evaluation of Completed Civil Works Structures Program. Copies of the reports of these inspections will be furnished to the Regional Engineer within 30 days of the date of inspection. The Corps and the Commission will take all necessary steps in coordination to avoid duplication of inspections.
- h. The Commission will require that the Licensee will assist the Corps District office by integrating the operation of the licensed hydroelectric facility into the Corps' emergency action plan.
- i. In the interest of hydropower operation compatible with other authorized functions of the Federal project, the Commission, upon recommendation by the Corps, will require the Licensee to enter into a memorandum of agreement with the Corps describing the mode of hydropower operation acceptable to the Corps. The Regional Engineer shall be a party to these

decisions. This memorandum of agreement shall be subject to revision by mutual consent of the Corps and Licensee as experience is gained by actual project operation. Should the Corps fail to reach an agreement with the Licensee, the matter will be referred to the OEPR for resolution. Copies of the signed memorandum between the Corps and the Licensee and any revision thereof shall be furnished to the OEPR and the Regional Engineer.

3. Access to the Project

The Commission will require the Permittee or Licensee to coordinate the development of its plans for access to the site during site investigation, construction, and operation with the Corps.

4. Annual Charge for the Use of Government Facilities

- a. Pursuant to Section 10(e) of the Federal Power Act, the Commission is required to assess a reasonable annual charge for the use of the Corps' facilities.
- b. The Commission is considering the issuance of a rulemaking to establish a methodology for determining annual charges for use of government facilities. The Commission will seek the comments and recommendations of the Corps in the selection of the methodology for determination of the annual charges.

5. Coordination with the Commission on Corps' Regulatory Requirements Under Section 10 of the River and Harbor Act of 1899

a. The Corps' Section 10 requirements for power related activities are met through the Commission's licensing procedure including insertion of terms and conditions in the license in the interest of navigation. Section 4(e) of the Federal Power Act requires approval of plans by the Secretary of the Army from the standpoint of interests of navigation. This authority was delegated by the Chief of Engineers to respective Corps' Division Engineers on September 5, 1980.

PART II

NOW THEREFORE, to the extent that the Corps has responsibility under the provisions of Section 404 of the Clean Water Act, for projects under the Commission's jurisdiction, and with respect to the Commission's responsibility under the Federal Power Act, the Commission and the Army further agree to the following:

1. Lead Agency for Environmental Processes

- a. If a Commission action involving an application for hydropower license or amendment thereto requires the review and approval by both the Corps and the Commission, the Commission will be the lead agency for environmental documentation pursuant to the procedures set forth below.
- b. As soon as practicable within the licensing process involving the need for a Department of the Army permit, the Commission staff will advise the Corps of its environmental analysis. The evaluation by the Commission of impacts upon the environment of all reasonable alternatives will to the maximum extent legally possible satisfy the requirements of both the Commission and the Corps. The Corps will to the maximum extent legally possible accept Commission resolution of issues raised during the environmental processing in order to eliminate further review of such issues during the Corps' permit process.
- c. The Commission will be responsible for environmental documentation which will demonstrate, where applicable and required by law, compliance with Federal environmental statutes.
 - d. As the lead agency, the Commission staff will:
- (1) Determine whether a proposed license action is a major Federal action significantly affecting the quality of the environment, or is "categorically excluded" from environmental documentation or is otherwise excluded from environmental requirements.
- (2) When the Commission staff determines that the preparation of an EIS or an environmental assessment is necessary, it will coordinate with the Corps to ensure that such environmental documentation adequately covers the portion of the work requiring a Department of Army permit.
- (3) Provide a copy of draft environmental documentation to the Corps for its information/comment.
- (4) Attempt to resolve environmental issues raised in the draft environmental documentation prior to the approval of the final environmental documentation, or, if issues are not resolved, the lead agency position will to the maximum extent legally possible be accepted by the Corps.
- (5) Provide the Corps with a copy of the final environmental documentation at the time the document is issued.
- (6) To the maximum extent permitted by law and applicable regulations, the Corps will accept FERC's findings on all environmental and regulatory matters on activities requiring a Department of the Army permit.

2. Cooperating Agency

- a. When an application requires both a FERC license and a Department of Army permit and the Commission determines that the project will require an EIS, the Corps will be provided an opportunity for input as a cooperating agency to ensure consideration of and compliance with its responsibilities in connection with the Clean Water Act.
- b. To the maximum extent permitted by law and applicable regulations, the Department of the Army officials conducting their review will accept the Commission's determination regarding the public interest.

3. Public Hearings

Where public hearings are required by the Commission and the Corps, such hearings shall be conducted jointly unless such joint hearings are not feasible.

4. Department of the Army Permit

- a. When review by the Corps is required by law, it will be limited to the geographic vicinity of the specific activity requiring a Department of Army permit. Unless required by law and applicable regulations, such review will not duplicate activities of any other Federal or State agency having jurisdiction on certain matters which otherwise might be reviewed by the Corps.
- b. The Commission will inform the Corps at the time it receives an application for a FERC permit or license so that the Corps may evaluate whether or not a Department of the Army permit is required. If such an Army permit is required, the Corps will immediately notify the applicant.
- c. Substantive comments relative to the Corps' public interest review will be furnished to the Commission and the applicant at the earliest possible date.
- d. Unless precluded as a matter of law or procedures required by law, the Corps will issue any required public notice not later than fifteen days after receipt of all information required to complete the application for the preferred action.
- e. Unless required by law and applicable regulation, the Corps will not insert special conditions in its permits without first consulting with the Commission concerning its conditions and will not duplicate effects of the Commission nor duplicate Federal, state, or local law or programs.
- f. To the maximum extent practicable, the Corps will take action on its permit application not later than 90 days after public notice is issued. The duration of the Department of the Army permit will be commensurate with the expected completion date of the proposed activity

and the Corps will consult with the Commission prior to establishing necessary dates.

5. General Permits

The Corps has found the practice of issuing general permits on both a regional and nationwide basis to be an effective way to reduce duplication, paperwork, and delays. The Commission and the Corps agree to cooperate with this program to the extent that a Corps permit is required. To assist the Corps in its general permit program, the Commission staff will advise the Corps of potential cumulative impacts that may occur as a result of activities authorized by the Commission. The Commission staff will also assist the Corps in its program to develop additional general permits for the Commission's authorized activities.

PART III

NOW THEREFORE, the Commission and the Army further agree to the following:

1. Procedures for Exchange of Information Between the Corps and FERC

The Commission and the Corps will establish procedures as may be necessary to coordinate their activities and to keep each agency fully informed on the activities of the other.

2. Effective Date and Modification

This MOU shall become effective on the last signature date below, and shall remain in effect until it is terminated or renegotiated upon request by either party. If either party finds that its terms need to be modified or amended, the other party shall be notified in writing of the specific change(s) desired, with proposed language, and the reason(s) therefore. A proposed change shall become effective upon written mutual consent of both parties, and shall become a part of this MOU.

3. This MOU extends only to the specific issues enumerated herein and does not apply to other program responsibilities of the Corps of Engineers, the Department of the Army, or the Commission.

The above conditions are approved.

C. M. Butler III	William R. Gianelli
Chairman, Federal Energy	Assistant Secretary of the Arm
Regulatory Commission	(Civil Works)
2 Nov 81	November 2, 1981
(Date)	(Date)

APPENDIX B

List of FERC Standard Articles Forms Used In Permits And Licenses For Hydroelectric Projects

The following FERC standard articles Forms are available from FERC offices:

FERC Forms (Revised October 1975)	Title
P-1	Terms and Conditions of Preliminary Permit
L-1	Terms and Conditions of License For Constructed Major Project Affecting Lands of the United States.
L-2	Terms and Conditions of License For Unconstructed Major Project Affecting Lands of the United States.
L-3	Terms and Conditions of License For Constructed Major Project Affecting Navigable Waters of the United States.
L-4	Terms and Conditions of License for Unconstruction Major Project Affecting Navigable Waters of the United States.
L-5	Terms and Conditions of License For Constructed Major Project Affecting Navigable Waters and Lands of the United States.
L-6	Terms and Conditions of License For Unconstructed Major Project Affecting Navigable Waters and Lands of the United States.
L-9	Terms and Conditions of License For Constructed Minor Project Affecting Navigable Waters of the United States.
L-10	Terms and Conditions of License For Constructed Major Project Affecting the Interests of Interstate or Foreign Commerce.